Appl. No.

09/945.024

Filed

August 30, 2001

AMENDMENTS TO THE SPECIFICATION

Please replace the paragraph beginning on Page 11, Line 16 with the following:

Figure 3 provides a schematic perspective view of the chip stack 132. As shown in Figure 3, the chip stack 132 comprises a plurality of lateral faces 142a, b, e, d 142a-142d and an upper and a lower face 144a, b 144a, 144b. Preferably, each lateral face of the stack 132 is comprised of a side surface of each chip 100 and the upper and lower faces of the stack 132 comprise the respective outer substrate surfaces of the chips located on the ends of the stack. Figure 3 also shows a plurality of electrical contacts 146 that are formed on the lateral faces 142a, b, e, d 142a-142d of the chip[s] stack 132. These electrical contacts 146 are preferably interconnected to the conductive leads that extend from the upper wiring level of each chip 100. In one embodiment, the chips 100 in the stack 132 are memory chips. In another embodiment, only a portion of the chips in the chip stack 132 incorporate the air bridge structures and the support frames as described above while the remaining chips utilize conventional circuitry and spacer material between chips so as to improve the overall structural integrity and ruggedness of the chip stack.

Please replace the paragraph beginning on Page 13, Line 3 with the following:

In one embodiment, the enclosure 202 is placed over the multi-chip structure 148 and attached to the upper surface 154 of the bonding substrate 152. Preferably, the enclosure is hermetically sealed to the bonding substrate so as to isolate the structure 148 from the external environment and to retain the thermally conductive medium 204 inside the enclosure. The enclosure 402 202 may be formed of an insulator material or a conductive material, such as glass or metal, in a manner known in the art. Preferably, the enclosure 402 202 is comprised of a copper alloy having a high thermal conductivity and sufficiently rigid to support a pressurized fluid. Moreover, the enclosure 402 202 is preferably comprised of a material that inhibits diffusivity of the thermally conductive medium 204.